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Shigeki Satou

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SEED INTELLECTUAL PROPERTY LAW GROUP PLLC

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EXAMINER

PAK, HANNAH J

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Attachment to Box 11

Response to Argument

The applicants' arguments filed 09/15/2010 are fully considered but are not found persuasive for the following reasons:

(A)

Applicants' Argument: The applicants contend that **(1)** there is no indication in the cited references that varying the apparent weight average molecular weight of the ethyl cellulose of dielectric paste will achieve a reduction in the defects of resultant electrical components formed in part by using such a paste (see Pages 3-4 of the Applicants' Remarks). The applicants also argue that **(2)** their claimed invention imparts unexpected results and further rely on paragraph 17 of Applicants' Patent Application Publication No. 2008/0233270 as support (see Pages 2-4 of the Applicants' Remarks).

Examiner's Response: **(1)** This contention is not convincing. As indicated in the previous office action, Donohue et al., like the applicants, employ an ethyl cellulose binder which is useful for a dielectric paste. Donohue et al.'s description of the ethyl cellulose binder is also inclusive of the claimed ethyl cellulose binder. Moreover, it can be inferred from the disclosure of other polymeric binders having an average molecular weight of 150,000-350,000 that the optimum average molecular weight of the ethyl cellulose binder lies in a similar average molecular weight range at Col. 6, lines 10-40 of Donohue et al. More importantly, however, Donohue et al., by virtue of not specifying the average molecular weight of their ethyl cellulose binder leaves the selection of such

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binder having the optimum or workable molecular weight useful for dielectric pastes up to one of ordinary skill in the art. Thus, contrary to applicants' contention, one of ordinary skill in the art would have been prompted to select ethyl cellulose binders having the optimum or workable molecular weight useful for the dielectric paste, such as those claimed, via routine experimentation, as indicated in the previous office action, *see MPEP § 2144.05, IIB*. The applicants have also not shown that one of ordinary skill in the art interested in forming dielectric pastes would have been led away from the ethyl cellulose binder having the claimed weight average molecular weight. **(2)** Nor have the applicants shown that the use of the ethyl cellulose having the claimed weight average molecular weight imparts unexpected results.

(B)

Applicants' Argument: The applicant s argue that **(1)** Donohue does not teach or suggest the claimed solvents, **(2)** but also leads away from the claimed subject matter by indicating that Beta-terpineol is a preferred solvent (see Pages 3-5 of the Applicants' References).

Examiner's Response: As mentioned before, **(1)** Donohue et al. mention broadly using other types of solvents outside those listed having a boiling temperature of 130-350 degrees Celsius at Col. 5, lines 25-32, but do not specify the other types of solvents as one of the claimed solvents. The non-patent literature teaches using a conventional solvent, such as that claimed, i.e., terpinyl acetate having a boiling point temperature of

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209 degrees Celsius. Thus, the collective teachings of Donohue et al. and the non-patent literature would have suggested using the claimed solvent, i.e., terpinyl acetate

(2) Moreover, the prior art (Donohue) is not limited to its examples, such as the preferred solvent. According to MPEP § 2123 [R-5], I, Rejection Over Prior Art's Broad Disclosure Instead of Preferred Embodiments, PATENTS ARE RELEVANT AS PRIOR ART FOR ALL THEY CONTAIN "The use of patents as references is not limited to what the patentees describe as their own inventions or to the problems with which they are concerned. They are part of the literature of the art, relevant for all they contain." II.

NONPREFERRED AND ALTERNATIVE EMBODIMENTS CONSTITUTE PRIOR ART

Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments (emphasis added). In addition, the applicants allegedly disclose that the beta-terpineol solvent causes all sorts of disadvantages, but do not point to any factually supported objective evidence. Thus, such statements are treated as merely conclusory statements, see MPEP § 2145.

(C)

Applicants' Argument: The applicants argue that one of ordinary skill in the art of multi-layered ceramic electronic components would not look to Kobayashi to formulate a ceramic green sheet having the claimed properties (see Pages 3 and 5 of the Applicants' Remarks).

Examiner's Response: This argument is not well taken. Kobayashi discloses using butyral resins having the claimed properties in dielectric films useful for electronic

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components, which can be inclusive of the claimed electronic component and dielectric paste, to obtain advantages, such as excellent storage stability. Thus, as indicated in the previous office action, it would have been obvious to one of ordinary skill in the art to employ the butyral resins having the claimed properties taught by Kobayashi in the dielectric film of the type discussed in Donohue et al. with a reasonable expectation of successfully obtaining desired properties.

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